

processing circuit 18. The image pickup element 14 converts an optical image, formed by the image pickup lens 12, into an electrical signal. The image pickup element control circuit 16 is provided with a timing generation circuit for supplying the image pickup element 12 with a transfer clock signal and a shutter signal, a CDS/AGC circuit for applying noise elimination and gain adjustment on the image signal from the image pickup element 12 and an A/D converter for converting the analog output of the CDS/AGC circuit into a 10-bit digital signal. The image pickup element control circuit 16 constantly outputs the image data of 30 frames per second. The image processing circuit 18 applies image processings such as white balancing and exposure adjustment to the image data from the image pickup element control circuit 16 and converts the image data into the YCbCr format for output.

There are also provided a CPU 20 for controlling the entire apparatus and executing an image compression/expansion process based for example on the JPEG standard, an LCD display device 22 serving as an electronic view finder, a display drive circuit 24 for driving the LCD display device 22, an LCD control circuit 26 for controlling the display drive circuit 24 thereby causing the LCD display device 22 to display the image stored in a VRAM 28, and a shutter switch 30. The LCD display device 22 functions as an electronic

view finder and has a display ability of 640 x 480 pixels.

There are also provided a RAM 32 including an image development area 32a, a work area 32b and a temporary evacuation area (or stack area) 32c, a flash memory 34 for storing taken image data, a ROM 36 for storing a control program for the CPU 20 and initial set information for folders, a rechargeable battery 38 constituting a power source, a DC/DC converter 40 for converting the output voltage of the rechargeable battery 28 into voltages required for the CPU 20 and other components, and a digitizer 42 functioning as character input means and a pointing device.

A system bus 44, connecting the CPU 20, the RAM 32, the flash memory 34 and the ROM 36, is composed of an address line, an data line and a control line.

A cradle 50, having a function of charging the rechargeable battery 38 and a backup function for the data stored in the flash memory 34, is provided with a power supply connector 52b which is connected to a power supply connector 52a connected to the rechargeable battery 38 in the main body of the camera and a data connector 54b which is connected to the system bus 44 in the main body of the camera. There are also provided a power supply circuit 56 for supplying various parts of the cradle 50 with electric power, a charging circuit 58 for charging the

rechargeable battery 38 with the output of the power supply circuit 56, a power supply detection circuit 60 for detecting whether the power supply connectors 52a, 52b are connected, by the voltage at the power supply connector 52b, thereby activating the power supply circuit 56, a hard disk device (HDD) 62 for image data backup, a control circuit 64 for controlling data writing into and data readout from the HDD 62 according to a control signal from the CPU 20, an image conversion circuit 66 for converting the image size and the number of gradation levels, and a USB connector 68. By connecting a computer to the USB connector 68, the memory content of the HDD 62 can be referred to from such computer.

In the following there will be explained the function of the present embodiment. The CPU 20 controls the operations based on the control programs in the ROM 36. Such control programs include those for a process of DMA transfer of the taken image data, outputted from the image processing circuit 18, to the RAM 32, a process of DMA transfer of the data from the RAM 32 to the LCD control circuit 26, a process of executing JPEG compression of the image data and storing the image data in a predetermined file format in the flash memory 34, and a process of instructing an image pickup operation based on the actuation of the shutter switch 30 and converting an input from the